

Mechanisms of inherited neurodegenerative diseases

<https://neurodegenerationresearch.eu/survey/mechanisms-of-inherited-neurodegenerative-diseases/>

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Contact information of lead PI

Country

USA

Title of project or programme

Mechanisms of inherited neurodegenerative diseases

Source of funding information

NIH (NIA)

Total sum awarded (Euro)

€ 995,840.37

Start date of award

Total duration of award in years

1

The project/programme is most relevant to:

Alzheimer's disease & other dementias

Keywords

Acquired Cognitive Impairment... Alzheimer's Disease Related Dementias (ADRD)... Alzheimer's Disease including Alzheimer's Disease Related Dementias (AD/ADRD)... Brain Disorders... Dementia... Frontotemporal Dementia (FTD)... Genetics... Neurodegenerative... Neurosciences... Rare Diseases... Stem Cell Research... Stem Cell Research - Induced Pluripotent Stem Cell... Stem Cell Research - Induced Pluripotent Stem Cell - Human

Research Abstract

The majority of our progress made during the past year has been in setting up our new lab. We

purchased necessary equipment and reagents to perform stem cell culture and neuron differentiation. We setup an automated microscope to facilitate data collection related to lysosomal dysfunction in stem cell-derived neurons. Using this microscope, we have begun to carefully characterize the lysosomal phenotype of our cellular model of progranulin-related FTD. In parallel, we have begun to optimize new proteomic approaches to determine how lysosomes change in protein composition in neurons that lack progranulin, in collaboration with the NINDS proteomics facility. During the past fiscal year, we have recruited a post-bac research assistant (Rajan Patel) and a lab manager (Maia Parsadanian). During the last quarter, we recruited two MD/PhD students (Michael Fernandopulle and Stewart Humble).

Lay Summary

Further information available at:

Types:

Investments > €500k

Member States:

United States of America

Diseases:

Alzheimer's disease & other dementias

Years:

2016

Database Categories:

N/A

Database Tags:

N/A